diseases of the eye and ear. He was one of the honorary surgeons of the Leeds Infirmary, and in full practice in that city. Mr. Hewetson was also an artist of some repute, and in spite of his professional engagements found opportunities for travels and researches on the Continent and in Egypt.

XL.-Letters, Extracts, Notices, &c.

WE have received the following letters, addressed "to the Editors of 'The Ibis'":—

Sirs,—As you may have seen by 'The Auk,' the next meeting of the A. O. U. is to be held at Philadelphia—the first time it has ever met here—the "cradle" of American ornithology, where so much was accomplished in the past. I hope that if any of our English friends are thinking of visiting America this autumn they will arrange to be in Philadelphia on November 13th, 1899. I can assure them of a warm welcome.

Yours &c.,

115 000.,

WITMER STONE.

Academy of Natural Sciences, Philadelphia, February 18th, 1899.

Sirs,—I am able to inform you with very great satisfaction that the suggested Ornithological Meeting in Serajevo will take place on the 25th of September next, and last until the 29th. The letters of invitation will be sent out very shortly.

Yours &c.,

OTTO HERMAN, Chief of the H. C. B. for Ornithology.

Hungarian Central Bureau, Budapest, March 22nd, 1899.

Sirs,—In his 'Manual of the Game-birds of India' Mr. E. W. Oates raises the question whether the species of Galloperdix in life carry the tail like a fowl or like a Partridge, i. e. folded vertically or flat. The Calcutta

Zoological Garden has recently acquired two males of G. lunulata, and from observation of these I can state that the form of the tail is Partridge-like, though, as I have seen one of the birds earrying it more raised and with the feathers lying less closely upon each other than the other, it is possible that it may on occasion assume a more or less vertically folded form; but such is not the ordinary form, at any rate with these two birds.

While on the subject of Indian game-birds, I may mention that the Indian Museum has lately acquired three specimens of the very rare *Microperdix manipurensis*, from Manipur. One of these was received from Captain H. S. Wood, I.M.S., who has shot, he says, over a hundred; and two from Lieutenant H. H. Turner, who has others. Lieutenant Turner has also shown me a specimen of *Coturnix japonica* recently procured in Manipur.

I ought to mention that Captain Wood states, in the letter accompanying his welcome donation, that he was indebted to Mr. Oates's Manual for his identification of his bird—an early tribute to the usefulness of this excellent little work.

Yours &c.,

F. FINN.

Indian Museum, Calcutta, April 20th, 1899.

Sirs,—Between the last week in January, this year, and the 23rd of March, a flock of about thirty Sand-Grouse (Syrrhaptes paradoxus) frequented a comparatively limited area on the Lincolnshire North Wolds, in the same parish and on the same farm where they first appeared in 1888. Their chief haunt has been a sandy field of twenty-five acres, recently laid down for permanent pasture, on the northern slope of the wold, and in a very retired situation.

The birds were first seen by the rabbiter (Grimoldly), who recognized them at once, having obtained five in the same locality in 1888, one of which I got (the rest, alas! were eaten). They were subsequently seen and accurately described to me by other competent observers.

I drove over on two occasions and examined the field; but was not fortunate in seeing the Sand-Grouse, although I found indications of their recent presence, and some feathers, which I sent to Professor Newton for confirmation.

On asking the shepherd on the next farm whether he had seen any strange birds about, he at once replied, "Do you mean the Sand-Grouse, sir?"; and on my replying "Yes," said he had done so several times, and recognized them as the same birds, one of which he had got, seen in 1888. He further said they were much tamer during the arctic weather (snow and frost) in March, and used to come to some wheat-stacks placed in a row on the wold-side, and once he saw them in the paddock near his cottage. He had got so near as to see their "little woolly feet," and once watched them following in file, like Partridges, down a furrow; but they "wobbled about" a good deal and did not walk steady. He thought they left the farm with the break-up of the storm later in March. They had a curious cry.

During their stay on the wold they used almost daily to take a flight of about a mile to two fields sown with wheat. Here they were repeatedly flushed by competent observers, all of whom remarked on their peculiar pointed wings and very rapid flight.

The district is so extensive, lonely, and thinly populated that, now the corn is sown, they might remain for months without again coming under observation.

When I was at Flamborough Head in April, Mr. Matthew Bailey, of that place, said a man (Mainprice) had observed a flock of what he at first thought were Golden Plover, in March; but on walking towards them he saw he was mistaken, and, when they rose, that they were Sand-Grouse, the same as those which he had shot in 1888.

P.S.—Subsequently to writing this letter I have been told of a single Sand-Grouse seen on May 19th, on the adjoining farm to that on which they first appeared in February this year; also of a small flight seen in the Spurn district on the evening of May 13th.

Dr. Ritter von Tschusi zu Schmidhofen [Ornithol. Jahrb.

x. 1899, Heft 2] records the fact of small flights of "Steppenhühner" having been repeatedly met with in the district of Bruck, a. d. L., and one also killed in Rohrau, Lower Austria-Hungary, about the end of July in 1898.

Yours &c.,

John Cordeaux.

Great Cotes House, R. S. O., Lincoln, May 9th, 1899.

Sirs,—In your notice of Mr. Hett's 'Dictionary of Bird Notes' ('Ibis,' 1899, p. 136) you say that you never before heard of a "murmuration" of Starlings. The term is given (with many others) by Daniel, who writes: "There was a peculiar kind of Language invented by Sportsmen of the middle Ages, which it was necessary for them to be acquainted with; and some of the Terms are still continued." ('Rural Sports,' vol. iii. p. 314.)

Yours &c.,

Bloxham, Oxon, May 17th, 1899.

O. V. APLIN.

Sirs,—I have to-day received the April number of 'The Ibis,' and read therein Mr. Blanford's letter. I can assure you that no one was more astonished than myself to find that I had casually come across forty "Swans" in the month of April last year. I allow that I made a great mistake in not writing either "Crane" or Grus antigone after the word Sarus.

Mr. Blanford is quite correct when he says that I overlooked the Tern-names on p. 306 of his work. I did so, for the very good reason that I never expected to find them there, but under their separate species as usual. 'Jerdon' I had not by me at the time. "Pancheera" I knew had been reported before. I only put it in to emphasize the fact that the word "Titri," or "Tihari," or "Tehari," did not apply to them. As a matter of fact, "Pancheera" is used indiscriminately by the boatmen for all the Terns.

It may interest those who have read my previous account

to learn that I went to Fatchgarh again this year, on April 4th, and obtained eggs of the following species:—

- 2 Skimmer. Rhynchops albicollis.
- 6 Large River Tern. Sterna seena.
- 3 Black-bellied Tern. Sterna melanogaster.
- 3 Little Swallow Plover. Glareola lactea.
- 27 Spur-winged Plover. Hoplopterus ventralis.
- 3 Lesser Ringed Plover. Ægialitis dubia.
- 2 Great Indian Stone-Plover. Esacus recurvirostris.

All the few eggs were fresh, except one clutch (3!) of *Hoplopterus ventralis* and the clutch of *Esacus recurvirostris*. The Ganges had shifted its course nearly $\frac{1}{4}$ mile, and I only found one island. In consequence the birds bred on the peninsulas.

On the one island mentioned I found a nest of *Hoplopterus* ventralis with 5 fresh eggs. While drifting down the stream I saw a pair of Indian Coursers (*Cursorius coromandelicus*) running along the edge of the water. I shot one (?), so that I am sure of the identity of the bird. Is this not rather a curious locality for a Courser?

Yours &c.,

WILLIAM JESSE.

La Martinière College, Lucknow, India, May 1st, 1899.

SIRS,—On the 23rd of last month (April 1899) a fine female specimen of *Caprimulgus ægyptius* (Lieht.) was brought to me, in the flesh, by a friend of mine who had shot it himself that morning near Palermo.

This is apparently the second undoubted instance of the occurrence of this species in Sicily and the Italian Kingdom, the first being that of an example obtained at Modica, near Syracuse, in December 1879, which specimen is now in the Royal Zoological Museum at Florence (Giglioli, Avif. Italica, 1886, p. 197).

Prof. Doderlein (Avif. Mod. e Sicil. p. 344) also alludes to a bird, which may have been of this species, as having been obtained near Girgenti; but no proper identification of this specimen seems to have been made, nor do we even know whether the skin was preserved.

In Malta the Egyptian Nightjar has apparently occurred occasionally, Prof. Giglioli (op. cit.) having noticed three examples of the species in the Valletta University Museum, said to have been obtained in the island in 1876.

In England the species has been recorded as having occurred once (Whitaker, 'Zoologist,' 1883, p. 374).

From Heligoland it has also been recorded once (Seebohm, 'Ibis,' 1877, p. 163).

Out of Europe *C. ægyptius* is apparently common in Egypt and Nubia (Shelley, B. Egypt, p. 175; Heuglin, Orn. N.O.-Afr. i. p. 128), and also in Turkestan (Severtzoff, 'Ibis,' 1875, p. 491; Dresser, B. Eur. iv. p. 629).

In Algeria and Tunisia the species occurs, and in some of the more southern districts may be considered as fairly common (Koenig, Reis. u. Forsch. in Algerien, p. 66; Whit. 'Ibis,' 1895, p. 102).

I have no knowledge of its occurrence in Morocco.

In conclusion, I may observe that the Sicilian example of *C. ægyptius*, which is the subject of this letter, is of the very pale isabelline form, and is identical in colour with a specimen I have from South Tunis.

Yours &c.,

Joseph I. S. Whitaker.

Palermo, 23rd May, 1899.

Note on Coccyzus euleri.—Coccyzus euleri Cab. (J. f. O. 1873, p. 73) is referred to C. americanus in the British Museum 'Catalogue of Birds' (vol. xix. p. 309), but is really quite distinct and easily recognized by its smaller size and the absence of rufous on the remiges. The bird was renamed by Dr. J. A. Allen as C. lindeni (Bull. Essex Institute, viii. 1876, p. 78), the identity of the two having been pointed out by Chapman ('Auk,' viii. p. 159). The latter also recorded an additional specimen in the collection of the American Museum of Natural History, from Matto Grosso, Brazil.

Another specimen, lately received at the Academy of Natural Sciences of Philadelphia from the interior of British Guiana, extends the range of the species very materially. Being interested in looking up the history of this little-known bird, I wrote to Dr. P. L. Sclater to ascertain whether any specimens had reached the British Museum since the publication of the nineteenth volume of the Catalogue. I was pleased to learn from him that one specimen from Aruwai, interior of British Guiana, had been obtained by the well-known collector Whitely on June 24, 1889. Cabanis's original specimen came from Cantagallo, Province of Rio, Brazil. The species has evidently a wide range, though apparently very scarce.—WITMER STONE, Acad. Nat. Sci., Philadelphia.

Quintocubitalism .- On this difficult point in the construction of the bird's wing two important communications were made to the Linneau Society on the 16th of March last, when Mr. P. Chalmers Mitchell, F.L.S., read a paper on so-called "quintocubitalism" in the wing of birds. He showed that the terms "aquintocubital" and "quintocubital," applied to birds because of certain conditions in the wings, were misleading, and proposed the new terms "diastataxy" and "eutaxy." Although the Columbæ are stated to be a diastataxic group, he remarked that "eutaxy" occurs in seven species, and that intermediate conditions exist, which suggested the probability that "eutaxy" is a secondary condition produced by the closing up of the gap in the distataxic form. From general considerations based on the anatomy and osteology of Columbæ, he concluded that the cutaxic forms were clearly more highly specialized and that they had been derived from diastataxic forms. Comparative anatomy making it exceedingly probable that "diastataxy" is the primitive condition among birds, Mr. Mitchell proceeded to show that the primitive existence of a gap was not difficult to explain. In the case of the scales on the fect of birds, and on the limbs and digits of reptiles, a general arrangement was the distribution in

transverse rows round the limb and in longitudinal rows on the digits. Where the two sets of scales meet interference occurred and led to modifications. He showed further how such interference might lead, in the case of a pentadactyle wing, to the occurrence of a gap after five secondary quills, and extended his argument to Aves generally, suggesting that "diastataxy" was "architaxy," and that "eutaxy" was a secondary modification that might easily have occurred at different times in different groups.

On the same evening Mr. W. P. Pycraft, A.L.S., read a paper entitled "Some Facts concerning the so-ealled 'Aquintocubitalism' in the Bird's Wing." He showed, by means of a series of lantern-slides, that "aquintocubitalism" was due to a shifting, backward and outward, of the secondary remiges 1-4 and of the horizontal rows of coverts The result of this shifting was to dissociate all the coverts preaxial to the 5th remex, i. e. all the coverts collectively forming one obliquely transverse row in front of the remex: the 5th remex forming a new connection with the corresponding row immediately behind—the 6th; while the 6th remex formed a fresh union with the 7th row, and so on. Thus the 5th remex was shown to have lost its original relations with its covert, and not its existence as was supposed. The terms-suggested by Prof. E. Ray Lankester—"stichoptilous" and "apoptilous" were proposed as substitutes for the older and less convenient terms quinto- and aquintocubitalism. All wings, it was shown, are, in the embryo, stiehoptilic, and later may become anontilic. Hence the author felt inclined to regard the former as the more primitive arrangement.

Avium Generum Index Alphabeticus.—We wish to eall the attention of all our friends engaged in ornithological work to the alphabetical index of the generic names used in the British Museum Catalogue of Birds which has been just issued as the ninth volume of the 'Bulletin' of the B.O.C. under the title given above. Mr. Waterhouse's careful compilation will, we are sure, be much appreciated by all who

have frequent occasion to refer to the twenty-seven volumes of the Great Catalogue, and will save them much labour in turning over its pages.

Birds of Somali-land.—Mr. and Mrs. E. Lort Phillips returned to London on May 1st after passing two months in the Highlands of Somali-land. The collection of birds made on the present occasion consists of about 300 specimens, many of which—such as Sylvia blanfordi, Buchanga assimilis, Tricholæma blandi, Telephonus jamesi, Dryoscopus funebris, and others, as also the nests and eggs of Eurocephalus rueppelli—are of considerable interest, though it has not yet been ascertained that any of the specimens belong to species absolutely new to science. Further particulars of the results arrived at will be given in a future number of this Journal by Mr. Lort Phillips, who has in contemplation a general work on the Avifauna of this most interesting and most attractive country.

Birds of the Gambia Colony.—Mr. J. S. Budgett, F.Z.S., who has been on a scientific mission to the River Gambia all the past winter on behalf of the Zoological Society of London, although he devotes his chief attention to Fishes, has not neglected the Birds, and is expected to bring back a good series of skins and spirit-specimens of this Class on his return to England. We are not aware of a single authority in existence on the Birds of this much-neglected British Colony.

New Handbook of South-African Birds.—Mr. Arthur C. Stark, M.B., is preparing a new "Handbook" of the Birds of Africa south of the Zambesi, of which the first volume will shortly be ready for issue. It will form a portion of Mr. W. L. Sclater's 'Fauna of South Africa,' a work planned on the same lines as Mr. Blanford's 'Fauna of British India,' and will be illustrated by many woodcuts in the text. The publisher is Mr. R. H. Porter.

New Work on the Nests and Eggs of Australian Birds.—Mr. A. J. Campbell, of Melbourne, sends us a copy of the prospectus of his proposed new work on the "Nests and Eggs of Australian Birds," on which he has been long engaged, and which will be largely based on the author's personal observations in various parts of Australia during the past thirty years. It is likely to extend to some 700 or 800 pages royal octavo, and will be illustrated by 130 photographic plates of nests, and coloured figures of some 200 eggs.

Birds of the Western Altai. - In the account of his recent journey to the Western Altai, read before the Linnean Society on the 15th of December last (see Journ, Linn, Soc., Zool, xxvii. p. 23), Mr, Elwes has done well in inviting our attention to this interesting country, which is now rendered easily accessible by the extension of the Trans-Siberian Railway to the banks of the Ob, up which Barnaul, the capital of the district, is readily reached by steamer. Mr. Elwes devotes but few remarks to the birds met with in the upper valleys of the Ob which he explored, and says they were "not so numerous as he expected," although "Cranes and Ducks were plentiful in the marshes." He found a Scoter breeding, which he refers to the eastern form of the Velvet Scoter, the Edemia stejnegeri of Ridgway*. Game-birds were "very searce," but the Capereaillie, the Ptarmigan, and the Quail were observed, and Tetraogallus altaicus inhabited the highest and barest parts of the mountains. A single pair of *Perdix barbata* with newly-hatched young were seen in a marshy larch-wood on July 18th.

When Mr. Elwes says "no ornithologist has worked out the birds of the Altai," he must have quite forgotten our friend Dr. Finsch, who visited this district in 1876, and has given an excellent account of his expedition in his 'Reise nach West-Sibirien' (Berlin, 1879). Dr. Finsch and his party went up the Irtish watershed, and, crossing over to

^{* (}E. carbo (Pall.) of Salvadori, B. M. Cat. xxvii, p. 411.

the headwaters of the Ob, descended to Barnaul. Dr. Finsch's article on the birds of Western Siberia (Verh. zool.-bot. Ver. in Wien, xxix. p. 128) enumerates 273 species and contains ample notes.

The Mode of Incubation of the Ostrich.—It being still the prevailing idea, even among the most recent authorities*, that the Ostrich (Struthio) is polygamous, and that the male performs the whole duty of incubation, it may be useful to give publicity to the subjoined extract from Mr. Cawston's 'Ostrich-Farming in California,' as to the habits of this bird on the thriving Ostrich-farms of Norwalk and South Pasadena near Los Angeles:—

"Early in the year, just as spring dawns, a pair will begin to build a nest, or rather to scrape one out of the ground. The male bird rests his breast-bone on the ground and kicks the sand behind; when one side is sufficiently deep he turns around and operates in a like manner, until a round hole about three feet in diameter and one foot deep is the result of his exertions; occasionally he intimates to the female that help is required, and they take turns. The hen forthwith begins to lay an egg every other day, until twelve or fifteen are located side by side in this hole in the ground; they scatter a little sand over the eggs to protect them from the fierce rays of the Californian sun; this habit has doubtless led to the supposition, printed in many ancient natural histories, that the eggs of the Ostrich are hatched by the sun, unaided by the birds. As soon as the full number of eggs are laid the couple share the labour of hatching, the male bird sitting on the eggs from 4 o'clock in the afternoon until 9 o'clock the following morning; and it may be understood with what skill this is performed when it is remembered that 250 pounds weight of Ostrich is bearing down upon fourteen eggs. At 9 o'clock the hen takes his place. The male Ostrich, however, with remarkable intelligence, relieves the female for an hour in the middle of the

^{*} Newton, Dict. Birds, p. 664; Evans, 'Birds,' p. 29; Royal Nat. Hist. iv. p. 559; Sharpe, 'Wonders of the Bird-world,' p. 16.

day, while she goes in search of the necessary nourishment. A pair will follow this *régime* with the greatest regularity for about forty days, when the chicks can be heard—telephoning as it were—in the shells. Frequently the chicks break the shells themselves, but often the hen can be seen pressing on the shell with her breastbone to assist the youngster in making his *début* into the glorious climate of California."

Birds living in the Zoological Society's Gardens.—In the aviaries of the Zoological Society of London there are at present several birds of considerable interest. A Ring-Ouzel, acquired in August 1894 in young plumage, turns out to belong to the Alpine form, Turdus torquatus alpestris, It is now in full dress in the British-birds Cages, where it has as its next neighbours two Nuterackers (Nucifraga caryocatactes), apparently of the long-billed form, if the two forms can always be discriminated. Hard by, in the Western Aviary, are examples of two scarce Ducks, Biziura lobata of Australia and Rhodonessa caryophyllacea of India, the latter a male in fine plumage. The Bower-birds have also lately made a most beautiful playing-place. In the Insect-House may be seen (and heard) a fine adult male of the Bell-bird of Guiana, celebrated by Waterton (Chasmorhunchus niveus). The curious caruncle on its forehead, now fully developed, hangs on either side of its bill, and is often retracted, when it forms little more than a warty excrescence. Its remarkable voice can be heard all over the Gardens, and is quite distinct from that of the Brazilian Chasmorhynchus nudicollis, an example of which may be seen in the same house.

The Parrot-House (overfull, as usual) contains, among the large series of Psittacidæ, examples of such rarities as Palæornis derbiana from China, Psephotus chrysopterygius from Australia, Nymphicus uvæensis from the Loyalty Group, Chrysotis pretrii from Brazil, Conurus rubro-larvatus from Ecuador, and a pair of Carolina Conures (Conuropsis carolinensis), sometimes supposed to be extinct. Three Mountain Ka-kas (Nestor notabilis) are occasionally indulged with mutton-chops. In the series of large eages at the back will

be found examples of four or five species of Toucans and a nice pair of Hornbills (*Lophoceros nasutus*), also a bright-coloured Hunting-Crow (*Cissa venatoria*).

The Great Aviary is now fully occupied, and five or six pairs of the Glossy Ibis (*Plegadis falcinellus*) are nesting on the trees. Some of the young birds are already hatched. In the Great Aviary also may be observed three examples of the White Sheathbill (*Chionis alba*) and a Jameson's Gull (*Larus jamesoni*) sitting on her nest. There are also to be seen Flamingoes, White and Scarlet Ibises, and other well-known inhabitants of this fully-stocked aviary; and hard by, in the Eastern Aviary, a Great Black-headed Gull (*Larus ichthyaëtus*), lately received from the Suez Canal.

In the Fish-House, among the Waders, may be noted a fine specimen of the Grey Plover (Squatarola helvetica) in full summer plumage, and a young example of the Redthroated Diver (Colymbus septentrionalis), purchased in January last, the exact determination of which was at first rather a matter of doubt. There are, besides, in this house good specimens of the Indian Diver (Plotus anhinga) and of the rare Sclater's Penguin (Eudyptes sclateri) (deposited by the Hon. Walter Rothschild) from the Auckland Islands. In a compartment near the Seal-pond will be found a remarkably fine example of the King Penguin (Aptenodytes pennanti), now in full and brilliant plumage, which has been living there since June 1897, and a specimen of the Gentoo Penguin (Pygosceles tæniatus) from the Falkland Islands, received in June 1898.

Dates of Jardine and Selby's 'Illustrations of Ornithology.'— In April 1894 I published a note on the dates of this book, of which that part on the "New Series" (vol. iv.) was merely tentative. Professor Newton has very kindly ealled my attention to a set of this "New Series," which belonged to Selby, and is now in his library, in the original wrappers, and has allowed me to make the following exact statement as to their contents:—

No.	1. Pls.	IVI., v	vith unpaged te	xt to each plate.	1837.
		VIIXII.,	,,	,,	1837.
	3.	XIIIXVII. (XIV. de	ouble) "	**	1837.
		XVIIIXXIII.	**	,,	1838.
	5.	XXIVXXIX.	**	96	1839.
	6.	XXXXXXV.	,,	• • •	1839.
	7.	XXXVIXLI.	,,	,,	1840.
	8.	XLIIXLVII.	**	**	1842.
	9,	XLVIIILIII.	,,	11	1843.

Lists of the plates contained in each of the first eight parts are printed on the outside of the wrappers.

It is only fair to say that this note is due to the inquiries of Mr. Chas. W. Richmond, of Washington, who, in his endeavour to obtain more exact information than I was able to give, applied to Professor Newton.—Davies Sherborn (Index Animalium).

Scientific Expedition to Alaska.—Among the names of the scientific men invited to join in the expedition to Alaska, as his guests, by Mr. Edward H. Hardman of New York, we are much pleased to notice those of Mr. D. G. Elliot of Chicago, Dr. A. K. Fisher and Dr. C. Hart Mcrriam of the U.S. Biological Survey, and Mr. Robert Ridgway of the U.S. National Museum. We hope that our friends will all have a "regular good time," and add much to our knowledge of the very interesting avifauna of Alaska. We learn from 'Science' that they expect to take the "inside passage" route to Lynn Canal, and then, after visiting Sitka, proceed westward along the coast to Yakutat Bay, Prince William Sound, Cook's Inlet, and Kodiak Island. Numerous places will be visited which are out of reach of ordinary travellers, and stops will be made to admit of scientific work. Steamlaunches, tents, camp-outfit, packers, and so on have been bountifully provided, so that the largest amount of work may be done in the shortest time.